

DEVELOPMENT OF INSTANT STRING HOPPERS WITH JACKFRUIT (*Artocarpus heterophyllus* Lam.) SEED FLOUR

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Jackfruit (*Artocarpus heterophyllus* Lam.) is found in tropical and subtropical parts of the world and has considerable nutritional benefits. This study aimed to develop instant string hoppers with jackfruit seed flour (JSF) and to evaluate the physical, nutritional, and sensory properties. Mature jackfruit seeds were sliced to a thickness of 2-2.5 mm, dried (65°C for 2 h), milled, and sieved by a mesh (mesh no-BSS 100). As treatments, different proportions of JSF (T1: 100%, T2: 75%, and T3: 50%) were mixed with white rice flour. Hot water (60°C) and water at ambient temperature (27°C) were used to develop the string hopper mixtures. String hoppers made with 100% white rice flour with hot water was used as the control (T4). The prepared string hoppers were dried in a tray dryer at 60°C for 3 h, packed and sealed in 200 gauge polyethylene bags, and stored at ambient temperature. Sensory evaluations were conducted using 30 untrained panellists to select the best proportion of JSF and the best water temperature to prepare the string hopper mixture. Sensory parameters, pH, and microbial count were analysed for six weeks under ambient conditions. The control was rated with the highest acceptance, followed by T2. Hot water (60°C) gave the best mixture to prepare the string hoppers. The total plate count, yeast, and mould count were at acceptable level up to six-week storage, however, after two weeks of storage, the sensory properties of string hoppers were not acceptable due to increased breakage of strings. The protein, fat, fibre, ash, carbohydrate, and moisture contents were 4.8±0.2%, 4.9±0.3%, 1.5±0.1%, 1.7±0.4%, 82.8±0.9%, and 2.9±0.2% (wet basis), respectively. A proportion of 75% JSF can be added to successfully develop instant string hoppers.

Keywords: Jackfruit seed flour, Nutritional quality, Rice flour, String hoppers